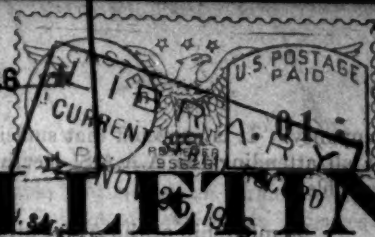


PROF. O. E. NEED  
CHIEF BUREAU OF DIETARY AND  
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# A.A.A.S. BULLETIN

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## A.A.A.S. Hotel Headquarters

### Boston Meeting, December 26-31

**Statler Hotel:** General headquarters for Executive Committee and Council; Section on Medical Sciences (N), Subsections on Dentistry (Nd) and Pharmacy (Np); Academy Conference, American Microscopical Society, American Society of Naturalists, American Society of Parasitologists, American Society of Zoologists, Genetics Society of America, Ecological Society of America, Limnological Society of America, National Association of Science Writers, Sigma Delta Epsilon, Society for the Study of Evolution, Society of the Sigma Xi.

**Bradford Hotel:** Sections on Psychology (I) and Education (Q); American Nature Study Society, National Association of Biology Teachers, National Science Teachers Association, Phi Lambda Theta.

**Commander Hotel:** Sections on Astronomy (D) and Geology and Geography (E); American Astronomical Society, American Meteorological Society. Meetings of these sections and societies will be held at Harvard University.

**Copley Plaza Hotel:** Section on Botanical Sciences (G); American Fern Society, American Society for Horticultural Science, American Society of Plant Physiologists, American Society of Plant Taxonomists, Botanical Society of America, Mycological Society of America, Phi Sigma Biological Society, Sullivant Moss Society.

**Kenmore Hotel:** Sections on Physics (B), Chemistry (C), Anthropology (H), Social and Economic Sciences (K), History and Philosophy of Science (L), and Engineering (M).

## Boston Hotels and Room Rates

Hotel or Club	Single Room	Double, twin beds
Avery	\$2.75-\$3.30	\$5.50
Bellevue	3.30-4.40	6.60-7.70
Bradford	3.30-3.85	6.00-7.00
Braemore	3.50-4.40	6.60-7.70
Buckminster	3.00-3.50	6.00
Charlesgate	3.85-4.40	5.50-6.60
Commander (Cam-bridge)	3.30	5.50-6.60
Commonwealth	2.50	4.50
Continental (Cam-bridge)	3.30-4.40	6.60
Copley Plaza	4.40-7.70	7.70-8.80
Copley Square	2.75-3.30	6.60
Fensgate	4.00-5.00	7.00
Gardner	2.50	4.40-5.50
Kenmore	3.85-4.40	6.60-7.70
Lenox	3.30	6.60
Lincolnshire	3.30-4.40	5.50-6.60
Minerva	2.50-3.00	4.00-5.00
Myles Standish	3.30-4.40	6.60-7.70
Parker House	3.85-4.40	6.60-7.70
Pioneer (for women)	2.00-3.00	4.00-5.00
Puritan	3.85	6.60
Sheraton	3.30-4.40	5.50-6.60
Statler	3.85-5.50	6.60-8.80
Touraine	3.30-4.40	6.60-7.70
Vendome	3.30-4.40	6.60
Boston City Club	3.50	5.50
University Club of Boston	3.50	5.50

Requests for reservations of rooms should be sent directly to the Convention Bureau, Chamber of Commerce, A.A.A.S. Meeting, 80 Federal Street, Boston 10, Mass. Only by such orderly procedure can the scientists be satisfactorily accommodated. Therefore requests for rooms made directly to hotels would either be returned or referred to the Convention Bureau. Name first, second, and third choice of hotels, accommodations desired, time of arrival, and days of

occupancy. It is expected that sufficient rooms for all attending the A.A.A.S. meeting will be available.

### Membership of the Association

On October 1, after removing the names of all persons who were known to have died and the names of all members who had resigned or were delinquent more than one year in their dues, the membership of the Association was almost exactly 28,500. At the same time, there were in addition several hundred new applications for membership, accompanied by checks for dues, for which the necessary paper work was in process but had not been completed.

On the membership roll of the Association are names of residents of every one of the 48 states, of Hawaii, of areas classified simply as "possessions," of Canada, of Mexico and nearly all the South American countries, and of the leading countries in every continent. As of the first of August this year the geographical distribution of the membership of the Association was as follows:

### Geographical Distribution of Members

Alabama	152	Nevada	44
Alaska	19	New Hampshire	94
Arizona	106	New Jersey	1,205
Arkansas	74	New Mexico	118
California	2,497	New York	4,574
Colorado	265	North Carolina	347
Connecticut	595	North Dakota	58
Delaware	165	Ohio	1,446
Dist. of Columbia	1,319	Oklahoma	179
Florida	291	Oregon	215
Georgia	233	Pennsylvania	1,885
Hawaii	129	Rhode Island	123
Idaho	51	South Carolina	129
Illinois	1,756	South Dakota	39
Indiana	507	Tennessee	278
Iowa	355	Texas	762
Kansas	223	Utah	147
Kentucky	189	Vermont	80
Louisiana	260	Virginia	517
Maine	102	Washington	319
Maryland	973	West Virginia	158
Massachusetts	1,424	Wisconsin	497
Michigan	953	Wyoming	51
Minnesota	535	Possessions	111
Mississippi	71	Canada	591
Missouri	576	Foreign	511
Montana	74		
Nebraska	172	Total	28,524

Since the interests of the Association include all fields of science, its work is organized under 15 sections: Mathematics, Physics, Chemistry, Astronomy, Geology and Geography, Zoological Sciences, Botanical Sciences, Anthropology, Psychology, Social and Economic Sciences, History

and Philosophy of Science, Engineering, Medical Sciences, Subsection on Dentistry, Subsection on Pharmacy, Agriculture, and Education.

Members of the Association are invited to become affiliated with one or two of the 15 sections and nearly all of them express their choices of sections. The distribution of the first choices of sectional affiliation on the first of last August was as follows:

### Distribution of Membership by Sections

Mathematics	985
Physics	2,239
Chemistry	5,490
Astronomy	358
Geology and Geography	1,417
Zoological Sciences	3,257
Botanical Sciences	2,014
Anthropology	372
Psychology	1,427
Social and Economic Sciences	620
History and Philosophy of Science	334
Engineering	1,965
Medical Sciences	5,238
Subsection on Dentistry	311
Subsection on Pharmacy	254
Agriculture	989
Education	574
No section	680
Total	28,524

### Dentistry in World War II

Since the new symposium volume "Dental Caries and Fluorine" is being printed and will soon be ready for distribution, the dental health of the 10,000,000 young men who were in our armies in World War II will give a factual basis for judging the desirability of such publications as that which the Subsection on Dentistry of the Association planned and prepared and which will soon appear.

The information contained in this report is derived from an article by Lt. Col. John C. Brauer, Dental Corps, Dental Division, Surgeon General's Office, U. S. Army, which was published in *The Merck Report* about a year ago. The first dental service in the U. S. Army was performed in February, 1901, by a contract dental surgeon. In 1911 the rank of First Lieutenant was made available to the Army Dental Corps, and in 1917 officers of the Dental Corps were granted the rights and privileges of officers in the Medical Corps. So recently was the importance of dental science formally recognized in our army! In World War II the Army Dental Corps had 15,000 dental officers in ser-

vice, more than 98 percent of whom had been recruited from civilian life.

Dental officers, as well as medical officers, saw service almost everywhere on the fighting fronts—with ski troops, paratroopers, aboard hospital ships, on ocean transports, and in hospitals of all theaters. They were everywhere available to supplement surgical operations involving the regions of the teeth. But similar to the Medical Corps, their first duty was to remedy dental defects and promote dental health. Their findings are the best evidence available of the dental condition of young men (ages 18 to 38) in the United States.

It was found that, on the average, for every 100 men inducted into the army 60 to 80 extractions of teeth were required and that approximately 15 in every 100 men required dental plates. In fact, 8.3 percent needed full upper and lower plates. Between Pearl Harbor and the close of the war the Army Dental Corps was called upon to repair or rebase more than 680,000 plates.

Since infections of the teeth and adjacent tissues can be distributed by the circulation of the blood throughout the entire body, dental health is now realized to be of high importance for men in military service. It is equally important for the entire population. The realization of this fact has directed attention to the prevention of dental defects instead of concentrating on the correction of those already present. The new symposium volume about to appear from the press is devoted to precisely this aspect of dental health.

#### The Wisconsin Junior Academy of Science

The Wisconsin Junior Academy of Science was founded in 1944 by the Wisconsin Academy of Sciences, Arts and Letters and the faculty of the University of Wisconsin. On the organizing committee were Dean E. B. Fred of the College of Agriculture, now President of the University; Dean C. J. Anderson; E. F. Bean, State Geologist; C. A. Dykstra, then President of the University; Professor E. M. Gilbert; Mr. Frank O. Holt; Dean M. H. Ingraham; Mr. A. W. Schorger; and Professor H. A. Schuette. The Junior Academy is thus a cooperative development of the State Academy of Science and the University.

Responsibility for the operation of the Junior Academy was placed upon the chairman of the Junior Academy Committee of the State Academy, Dr. John W. Thomson, Jr. In turn, the University released the chairman from teaching

duties in the Department of Botany in order to make available his time for the Junior Academy work. The College of Letters and Sciences of the University also provides necessary travel and office expenses, and some additional financial support is given by the State Academy. Two advisory committees participate in this work with the teen-age future scientists. One, appointed jointly by the University and the Senior Academy, is the over-all supervisory and advisory group; the second, comprised of high school teachers active in science club work, represents different areas of the state.

Two district meetings of the Junior Academy were held in 1946, one in the eastern part of the state and one in the central part. At these district meetings boys and girls present their projects or demonstrations which are graded by a committee of teachers of science in high schools and colleges and by members of the State Academy. Authors of the best papers or demonstrations are invited to present them at the Junior Academy section of the State Academy annual meeting.

The American Association for the Advancement of Science awards an honorary junior membership in the Association to one boy and one girl nominated by each of its affiliated academies of science. In Wisconsin the honorary junior memberships are awarded at the annual meeting of the Academy to students in their junior high school year so that they will be in effect in their senior year and of greatest influence in their respective schools. Six honorary annual memberships in the Wisconsin Academy are also awarded to the juniors. These, like the Association awards, entitle the recipients to publications, as well as to other privileges of membership. The generosity of an Academy member and of Gamma Alpha made possible the distribution of a few cash awards for excellent and original work during the 1945-1946 season.

In Wisconsin each high school science club pays an annual membership fee of \$2.00 for which it receives a charter and membership cards for all its members, who automatically become members of the Junior Academy.

To keep the science clubs informed of each other's activities, mimeographed news letters are issued at irregular intervals from the central office. Five were issued during the past year. A new venture is the publication of a mimeographed bulletin entitled "Test Tube Times." This publication is sponsored and issued by the member clubs in rotation, each being responsible for one issue.



The results of the cooperative effort in Wisconsin to encourage the teen-age scientists have been very gratifying. The enthusiasm and interest of the Juniors at the State Academy meeting very favorably impressed the senior members. But probably the most important result has been that the young scientists feel that they are being recognized and that there is room for them in the scientific world.—JOHN W. THOMSON, JR.

### The Council

In the March 1 issue of *Science*, the Association's revised Constitution was published in full, and it was adopted by the membership on March 27 at Saint Louis. It is a comparatively short document, with which our own members and the members of our 198 affiliated and associated societies should be familiar. But it is not easy to keep its eleven articles in mind, hence it may not be amiss to discuss some of the Constitution's provisions in the pages of the *Bulletin*.

Article IV, Section 1, provides that "control of all affairs of the Association is vested in the Council. . . ." Section 2 defines the composition of the Council as "(a) the President Elect, the President, the Retiring President, the Vice Presidents, the Secretaries of the Sections, the Administrative Secretary, the General Secretary, the Treasurer, and the eight elected members of the Executive Committee; (b) one Fellow elected by each regional Division of the Association; and (c) the representatives of affiliated organizations. . . ."

Article VII, Section 2, prescribes that "each organization elected to be an Affiliated Society shall be entitled to name one Fellow of the Association to represent it in the Council; if it has more than one hundred members who are Fellows of the Association, it shall be entitled to name an additional Fellow of the Association to represent it in the Council."

It will be evident from these constitutional provisions that the Council is large, and that it is dominated by representatives of affiliated societies. The maximum number of members is fixed at any one time (259 at the moment), but the actual number is a variable, for it depends upon the representatives chosen by the societies. Each Council member is entitled to a single vote on any question, but it not infrequently happens that a society will select a Section Secretary or an Executive Committee member as its representative, or two societies may choose the same person to represent them. One member of the pres-

ent Council actually holds three such posts, but he is, nonetheless, restricted to a single vote on any issue. For this reason the membership of the Council drops below the theoretical maximum, but only death can leave any position vacant. The Constitution stipulates that each member shall serve until his successor takes office, hence failure of an affiliate to name a new representative merely means that the old one continues to serve.

Of the 259 places in the Council only 46 go to officers or appointees of the Association, and one-third of these—the Vice Presidents—are nominated within the fifteen Sections. Another third—the Secretaries of the Sections—are normally named by the Section Committees, which are dominated by the representatives of the affiliated societies within the several scientific fields. In an organization where eighty-two percent of the governing body is composed of representatives of constituent societies and all the rest are directly picked or elected by these representatives, it is no exaggeration to say that the Association is run by its affiliates.

This fact needs some publicizing. In the assortment of opinions which the mails bring into the Washington office, a few reveal ignorance of the Council's structure and function, and a few even deny its authority. One Fellow, in a series of four letters, has strenuously protested the principle of representative government, claiming that no one is authorized to represent him, but that every member of the Association should vote on all matters of policy. It may be granted that there is something fundamentally sound and healthy about the town-meeting type of rule which this member advocates, but he overlooks the real significance of the Association's representative form of government. Whereas there are 28,500 Association members, the affiliated societies have memberships aggregating roughly half a million scientists, who, regardless of their status in the Association, actually express their will through their representatives on the A.A.A.S. Council. A few of the 28,500 may not like the thought that so many scientists who individually assume no financial responsibility toward the Association should exercise some influence in its affairs, but they may take comfort in the knowledge that each of the 46 Council members who represent the Association serves on a proportionate basis, for 625 members of the Association, whereas each representative of an affiliated society theoretically serves for 2,000 members and non-members.

It is evident that every effort should be made to keep the A.A.A.S. Council truly representa-

tive, and this effort is wholly in the hands of the affiliated societies. It is they and they alone who are responsible for the selection of their representatives. The Constitution imposes but a single limitation on their choice—Council members must be Fellows of the Association. Within this limitation it should be possible to find scientists who have a broad outlook and an open mind on general problems affecting science and scientists and, at the same time, an intimate knowledge of their own societies' attitudes, policies, and special interests. Whether these people are elected or appointed is immaterial so long as they function as representatives of their own memberships within the governing body of the Association in the conduct of Association business and the determination of Association policy.

That some affiliates have made—and will make—poor selections is inevitable, but the number is small. In an average mail vote of the Council, the returns are normally seventy-five percent of the total membership. No accurate check has been made, but spot-checking indicates that approximately two-thirds of those who fail to vote are habitual non-voters and are thus total losses to the societies which appointed them. It is not, however, the Association's function to monitor the votes, but it is the prerogative of the societies to check upon their own people. It is the Association's earnest hope that this will be done, for it wants active participants in its affairs rather than a roster of distinguished names.

On one question referred to the Council there was a ninety-five percent return. This was the question of official support of the National Science Foundation bill, S.1850. The result of this vote demonstrates conclusively that the little apathy which exists disappears when matters of vital interest are involved. And it suggests that, however controversial some questions of general interest may be, scientists are alive to their responsibilities and want the Association to assume some leadership in effecting their resolution. If such leadership is assumed, it can only be done on a democratic basis, and that is on the basis of the representative opinions expressed by the members of the Council.

Within recent months governmental departments have found it necessary to decide which scientific organizations best represent American science and American scientists. The National Research Council rates high as a spokesman for American science, and almost any society takes a high rating as a spokesman in its own field. But for general representation the Association has invariably been selected, and for this reason

it has critically scrutinized its own machinery for the accurate reflection of views from every field of science and from scientists in every field. Its membership comprises only 28,500 and is obviously only a sample—though a significant sample—of the scientific professions. Its Council, on the other hand, represents half a million scientists and some laymen who are interested in science. The officers are concerned, therefore, that this representation be active, accurate, and adequate; that it reflect official views of affiliated organizations, as well as the composite reactions of scientists in the several fields. For each Council member chosen, only his electorate can judge his qualifications. The Council—and the Association—are in the hands of our affiliates and our members.—H.A.M.

### Student Members

The Association has reported from time to time on the steady increase in its membership, but it has been kept humble by the knowledge that its roster of individual members includes fewer than 5 percent of the nation's scientists. This situation has led to considerable introspection, and apparently some of our members have given it serious and constructive thought. Recent correspondence with a member of 45 years' standing has brought in several valued suggestions which are well worth passing along. As an engineer, he writes primarily about engineers, but his remarks, which are in part quoted and in part paraphrased below, apply with equal force to other fields of science.

"The advancement of science may be regarded from three somewhat different points of view, the first is that of extending scientific knowledge, irrespective of the number of people who possess the knowledge, or how much of it each possesses. This is the field of research. The second point of view is that of extending scientific knowledge to a greater number of people. This is the field of education and of publicity. The third point of view is that of extending the use of scientific knowledge in engineering and industry generally.

"I think that the membership of the A.A.A.S. has been recruited chiefly from those who are engaged in teaching . . . unless I am greatly mistaken, engineers and those engaged in industry are but poorly represented. . . .

"The professional societies . . . have been diligent in interesting those who specially qualify themselves in a given branch of engineering to join the national societies even before graduation. There is not a similar attempt made to interest



students in the advancement of science from the point of view of the A.A.A.S. . . . it is of great importance that these people who are picked to join the professional societies should also be interested . . . in the broader aspects of science which bear not merely upon industry but upon culture and civilization itself.

"I think that one reason why young engineers in all branches of the profession do not join the A.A.A.S. is lack of interest in the truly cultural aspects of all science by the faculties in our colleges and universities. . . . I do not think interest in the cultural aspects of science can be aroused by perfunctory arrangements in the curriculum. What is needed is a more living interest in and faith in scientific culture by those responsible for guidance . . . and a definite endeavor to broaden the outlook of the students.

"The duty of imparting culture—science is a part of culture—definitely belongs to education, educational institutions and teachers . . . the A.A.A.S. might not only greatly extend its membership, but might exert a very beneficial influence upon the coming generation if it would establish its work and an interest in its objectives among the college students, and arouse among the teachers an obligation to impart to the students higher ideals than merely to be able to get a paying job after they have been ground through the mill, necessary as a paying job may be.

"In my opinion college professors generally, especially in the technical colleges, fail lamentably to interest students in science as science. . . ."

The author of these remarks, William Mayo Venable, proposes that

- (1) College teachers encourage students to join the Association.
- (2) Members of the Association look about them, particularly in industry, to spot scientists, engineers and technicians, to find men with qualifications to join.

The second of these recommendations has already been followed by many members who, in returning the biographical cards for the directory, have nominated colleagues for membership. It is hoped that still more will avail themselves of this opportunity before the close of the year. So far as is known, only a few of our many academic members have brought the possibility of membership to the attention of their students, and it is desirable and important that they do so.

Some societies—including most of those in the engineering group—have student memberships which draw upon student personnel after some screening by members of instructional staffs. In

many fields, however, the student is an outcast. Except for a "journal club" or some faculty-dominated organization, there is nothing in his field which he can join. The director of his thesis may "introduce" him as a speaker on the program of a professional society, and the Program Committee may magnanimously allot him all of ten minutes, along with similar allotments for fifteen other students, for the presentation of months of conscientious research. Even in those organizations which classify dues-paying students as *student members*, they are either expected to sit quietly and watch their elders, or they are condescendingly permitted to participate in "student meetings," "student nights," and other activities designed paternally for their encouragement and edification.

If anyone fancies that serious students are particularly happy about their treatment, he knows little about psychology. The ranks of the Association could easily be recruited from disgruntled graduate students and by indignant young scientists who have been "brushed off" by the organizations which should be furthering their professional progress.

But it is not the ambition of the Association to recruit its membership in this way. As Mr. Venable so accurately points out, the professional societies and the Association are not competitive either in composition or in function. The chemist should aspire to membership in the American Chemical Society as a chemist, and to membership in the A.A.A.S. as a scientist. And he should be a better member of the A.A.A.S. by virtue of his membership in the A.C.S., as well as a better member of the A.C.S. by virtue of membership in the A.A.A.S. But does he know this?

Mr. Venable has given the answer for a great many young engineers and scientists—and some older ones too. They do not even know that the Association exists, or what it does, or what it publishes. And they cannot know, unless they are told—any more than the graduate student in geology can know about the professional organizations and publications in that field without being told.

Here, then, is a responsibility which Association members should be willing to assume—the responsibility to instill in their students or in their laboratory and field assistants a concern about the broader aspects of science, and to acquaint them with the work of the American Association for the Advancement of Science. Any normal student, or, for that matter, any normal instructor, laboratory technician, or field

assistant who is just getting grounded in his profession will be pleased to be nominated for membership and pleased to know that there is a functioning organization of this kind to which he can belong.

We endorse and echo the recommendation of Mr. Venable, that "each member submit the name of a person who is interested in Science as Science." There is no better way of infusing new life into the Association, or of advancing science by furthering a spirit of unity among scientists, or of giving young scientists a "lift" along the arduous road to professional distinction.—H.A.M.

### Agricultural Institute of Canada

Agriculture, while one of the oldest of occupations, is one of the youngest of professions. This is the case today, as it was in 1920 when the Canadian Society of Technical Agriculturists was founded.

At that time technical agriculturists had commenced to bring about a certain amount of associative action in various branches of the industry. As professional men, however, many felt that they had failed to exert the influence they should in shaping agricultural policy because, lacking organization, they were unable to speak authoritatively as a representative body. What was required, both to serve agriculture more effectively and also to give the profession the recognition it merited, was a national society. Five men, M. B. Davis, F. L. Drayton, F. E. Buck, G. LeLacheur and F. H. Grindley, gave themselves to the task of bringing this organization into being. Between October of 1919 and June of 1920 they worked ceaselessly to make possible an organizing convention. This was held in Ottawa on June 2 to 4, 1920, and the Society was launched with a membership of 417. The Chairman, M. B. Davis, stated the ideas of the founders in these words:

What has been aimed at in the organization of this Society is a far reaching representative organization of democratic tendencies for the purpose of bringing agricultural scientists of this country into closer touch with each other and with their problems, a Society which shall stand for advancement and efficiency, a Society which shall be a medium for clarifying our various theories and ideas. We have in our free country the right of public opinion, which may bring moral pressure to bear, without assuming any direct action. It is hoped that this Society will be a body not seeking powers of jurisdiction but a body with such a reputation that ideas originating within its folds will carry such force and weight that they will be seriously considered by those who guide our agricultural destinies.

Speaking a year later at the first annual meeting of the Society, the first President, Dr. L. S. Klinek, outlined the principal objectives of the organization as follows:

Let us place at the head of the list of objectives toward which the Society should work, insistence upon higher

academic standards for undergraduates and larger opportunities and better facilities for post-graduate courses.

The second important objective of the Society is the bringing about of more co-operation between the workers in the Dominion and Provincial Departments of Agriculture, and these in turn with those who are engaged in college work.

Unquestionably, technical knowledge and skill justly entitle the possessor to professional standing, to merited recognition, and to financial returns commensurate with the service rendered. Technical agriculturists have been among the last of the professional men to organize. They have much to learn about themselves as members of a profession, and still more as regards educating the public to place a proper valuation on their services. This in itself will call for the expenditure of time, of money, and the development of an *esprit de corps* on the part of the members of this Society. When our members speak of attaining the ends sought by other technical workers it rests with themselves to determine what course shall be pursued and how far the Society is prepared to go.

These three objectives—higher scholastic standards in agricultural education, closer coordination of agricultural services, and improvement in the professional status of graduates in agriculture—still constitute the major objectives in the Institute's program.

The basic unit of the organization is the Branch—of which there are 22, with one or more in each of the provinces and one in London, England, to serve the members resident in the United Kingdom. Canadian Branches are located as follows: Prince Edward Island; Nova Scotia; New Brunswick; Montreal; MacDonald College, Quebec; Eastern Ontario; Central Ontario; Ontario Agricultural College; Niagara Peninsula; Eastern Manitoba; Western Manitoba; Swift Current, Sask.; South Saskatchewan; Indian Head, Sask.; North Saskatchewan; South Alberta; Calgary District, Alta.; Edmonton; B. C. Interior; Vancouver, and Victoria and Islands, B. C.

The other section of the organization of most value to the individual member is that comprising subject group divisions. These cover most of the major fields of agriculture and are being expanded to include a few not represented at the moment. In addition, there are a number of societies in Canada which are affiliated with the Institute. A number of these societies will be changing their status to become subject groups within the Institute.

Matters of regional or provincial concern are dealt with by regional or provincial councils. These exist in most provinces, with a regional council covering the Maritimes. The organization has always been active in matters affecting the welfare of the professional workers in agriculture. A new development is the growth of provincial professional bodies, incorporated under provincial laws, to maintain standards in the profession. As this type of legislation is a provincial responsibility, a separate act is required in each province. The first province to reach this point in the development of professionalization, as an integral part of the national organization, was Saskatchewan where a bill incorporating the Saskatchewan Institute of Agrologists was passed on April 4, 1946. The term "agrologist," coined from the Greek language to meet

the need for one word denoting "professional agriculturist," has received a good reception and is rapidly becoming a common term in Canadian agricultural circles.

The Central Office of the organization is at 1005 Confederation Building, Ottawa, Canada. It operates under the direction of a National Council which is composed of provincial or regional Directors elected by the members.

Membership in the Institute is open to university graduates in agriculture, or to graduates of other faculties provided they have the necessary experience in agriculture. Junior Members (graduates of less than three years standing) pay an annual fee of \$5.00; Fellows, Members, and Associate Members pay an annual fee of \$10.00. These fees include subscriptions to *Scientific Agriculture*, monthly, and to the *Agricultural Institute Review*, bi-monthly. Associate Membership is open to non-graduate workers in the field of agriculture, on the recommendation of a Branch and with the approval of the National Credentials Committee. Membership has increased steadily through the years and is now approaching the 2000 mark.

In its early days the organization commenced to publish a scientific agricultural journal in order to provide a Canadian outlet for the results of Canadian research workers. *Scientific Agriculture* is now in its 26th volume and reaches agricultural scientists in all parts of the world. To meet the need for a journal which would present recent developments and trends in agriculture, as well as matters of general interest to the membership, a quarterly magazine, the *C.S.T.A. Review*, was established in 1934. This publication now appears as a bi-monthly, under the name of *Agricultural Institute Review*.

Eight years after the organizing convention, the Society was incorporated under a Dominion of Canada Charter. In 1945 a further change was made whereby the constitution was brought into line with present requirements, and the name of the organization was changed to "Agricultural Institute of Canada."

One of the far-reaching and infrequently recognized accomplishments of the Institute is to be found in the expanding relations between agriculture and industry. At the time the Society was formed a relatively small number of agricultural graduates obtained positions with industrial or commercial firms. Today about thirty percent of the Institute's members are employed by industry. Owing to the increasing realization in industry of the contribution to the national welfare that is being made by the professional agriculturists, the Institute has been able to promote a scholarship fund to encourage deserving students to take post-graduate work. This year a total of 20 such scholarships, each worth \$800, have been allocated. Fourteen of the recipients will study at various universities in the United States, and the balance in Canada. The fourteen will be returning to their present positions upon completion of this advanced work.—C. GORDON O'BRIEN.

## Membership in the Association

### Eligibility for Membership

Membership in the Association is open to all persons engaged in scientific work, whether in the fields of the natural or the social sciences; to all amateur scientists, whatever their special interests; and to all who desire to follow the advances of science and its effects upon civilization. Members having made substantial contributions to the advancement of science are eligible for election as fellows.

### Dues and Publications

Membership dues are \$5 per year, including subscriptions for the monthly A.A.A.S. BULLETIN and either the weekly journal *Science*, now in its 104th volume, or *The Scientific Monthly*, now in its 63rd volume. *Science* is a journal for professional scientists; the *Monthly* is a nontechnical journal for the intelligent public. The Association also publishes technical symposia and nontechnical books on science that are available for members at prices substantially below those to the public.

### Organization and Meetings

The Association was founded in 1848, with an initial membership of 461. Papers in its early programs were classified as either natural philosophy or natural history. Now its work is organized under 16 sections and 197 associated societies having a total membership of over 500,000. Its annual meetings are the greatest regular gatherings of scientists in the world.

### Nominations and Applications for Membership

Members may submit nominations for membership at any time, and persons desiring to become members can obtain membership application forms from the Office of the Association, 1515 Massachusetts Avenue, N.W., Washington 5, D. C.

### Changes of Address

New addresses for the Association's record and for mailing the journals *Science* and *The Scientific Monthly*, as well as the A.A.A.S. BULLETIN, should be in the Office of the Administrative Secretary, Washington 5, D. C., at least two weeks in advance of the date when the change is to become effective.

### Officers of the Association

*President*, James B. Conant; *Administrative Secretary*, F. R. Moulton; *General Secretary*, Otis W. Caldwell; *Treasurer*, W. E. Wrather.

*Executive Committee*: Charles F. Kettering, *Chairman*; Otis W. Caldwell, Anton J. Carlson, Arthur H. Compton, James B. Conant, Burton E. Livingston, Kirtley F. Mather, Walter R. Miles, F. R. Moulton, Fernandus Payne, and Elvin C. Stakman.



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